

MKS-70 SPECIFICATIONS

- Memory: Internal Memory (64 Patches, 50 Preset Tones, 50 Programmable Tones), External Memory (64 Patches, 50 Tones)
- Buttons: Patch Memory (A to H, 1 to 8), Edit (Patch, Tone, MIDI, Parameter, Value, Name), A/B (also moves cursor), Chase Play, Cartridge, Write, Shift, Enter, Master Tune
- Controls: Volume, Alpha-Dial
- Switches: Memory Protect, Power
- Jack: Headphones
- Connector: Programmer In
- LED's: MIDI Indicator, Mono Mode Indicator
- Display: 32-digit, fluorescent display
- Rear Panel: Output Jacks (Total Mix, Tone A Right, Tone A Left, Tone B Right, Tone B Left), Switch (Output Level), MIDI Connectors (In, Out, Thru)
- Dimensions: 480(W) x 400(D) x 88(H) mm (18-7/8" x 15-3/4" x 3-7/16"), 19" rack-mountable (EIA-2U)
- Weight: 76 kg (16 lb. 12 oz.)
- Accessories: Connection Cord x 2, MIDI Cable, M-64C Memory Cartridge, Edit Map

REAR PANEL



PG-800 PROGRAMMER



Roland's MKS-Series MIDI Sound Source Modules

MKS-50 POLYPHONIC SYNTHESIZER MODULE



A Synthesizer Module with Easy Sound Synthesis and Versatile Performance Functions

- A variety of parameters for flexible sound synthesis
- 128 tones and 128 patches
- Chord memory function for storing sixteen chord patterns playable by a single note
- Velocity- and pressure-responsive
- Six-voice polyphonic
- Operable in MIDI omni off/mono mode
- Dimensions: 480 (W) x 290 (D) x 44 (H) mm (18-7/8" x 11-7/16" x 1-3/4"), EIA-1U
- Weight: 3.5 kg (7 lb. 11 oz.)

PG-300 PROGRAMMER



MKS-100 DIGITAL SAMPLER MODULE



A MIDI Sound Module that Adds the Digital Sampling Capability to Any MIDI Setup

- Superb sound quality equal to the S-series digital sampling keyboards
- Instantly-selectable four wave memory banks
- Velocity-responsive
- Split function
- Disk drive for 2.8" Quick Disks
- Simple-to-operate auto-record and auto-loop functions
- Accepts sound library disks available for the S-10 digital sampling keyboard
- Operable in MIDI omni off/mono mode
- Dimensions: 483 (W) x 410 (D) x 90 (H) mm (19" x 16-1/8" x 3-9/16"), EIA-2U
- Weight: 7 kg (15 lb. 7 oz.)

MKS-20 DIGITAL PIANO MODULE



The RD-1000 Digital Piano in a Rack-Mountable Package

- Digital sound source incorporating Roland's proprietary S/A synthesis
- The same eight preset sounds, editing parameter, and memory capability as the RD-1000
- Fifty-six edited sounds in internal memory and sixty-four sounds in the M-16C memory cartridge
- Alpha-dial and LCD for easy operation
- Dimensions: 480 (W) x 400 (D) x 90 (H) mm (18-7/8" x 15-3/4" x 3-9/16"), EIA-2U
- Weight: 8 kg (17 lb. 10 oz.)

SUPER JUPITER MKS-80 POLYPHONIC SYNTHESIZER MODULE



A Synthesizer Module offering the Legendary "JUPITER" Sounds

- Extremely warm, thick sounds produced by sixteen VCO's, eight VCF's, eight VCA's, and sixteen ENV's
- Velocity- and pressure-responsive
- Sixty-four tones and sixty-four patches in internal memory
- 128 tones and 128 patches in M-64C memory cartridge
- Dimensions: 482 (W) x 410 (D) x 90 (H) mm (19" x 16-1/8" x 3-9/16"), EIA-2U
- Weight: 8 kg (17 lb. 10 oz.)

SUPER JUPITER PROGRAMMER MPG-80



Roland

SUPER JX MKS-70 POLYPHONIC SYNTHESIZER MODULE



*Specifications and appearance subject to change without notice.

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MKS-70—A Compact Package that Adds the Ultimate in Synthesizer Sounds to Your MIDI Setup

SUPER JX MKS-70 POLYPHONIC SYNTHESIZER MODULE

The MKS-70 is equipped with the same superb sound source as the SUPER JX, one of today's most advanced synthesizers employing Roland's state-of-the-art analog/digital hybrid technology.

Featuring sophisticated synthesizer circuitry, extensive programmable functions, flexible outputs, full MIDI implementation, and many other attractive features, the MKS-70 offers unlimited creative possibilities in sound synthesis, playing technique, and sound amplification.

Twelve-Voice Polyphonic Sound Source & 100 Tones

The MKS-70 is a twelve-voice polyphonic synthesizer module. It incorporates two independent six-voice polyphonic synthesizer sound circuits and uses two DCOs, one VCF, one VCA, and two Envelope Generators to produce each voice. (Twenty-four DCOs and twenty-four Envelope Generators are provided.) It offers fifty preset tones and can store another fifty programmable tones—a total of 100 tones are under your command. The fifty preset tones include Roland's popular orchestral instrument sounds, extremely percussive, metallic sounds normally obtained only from digital synthesis, and distinctive cross-modulated sounds among others. Though each preset tone is singularly beautiful, an even more impressive sound can be produced by layering two tones in the Dual Mode.

Extensive tone parameters are provided for sophisticated sound synthesis capabilities. A chorus effect is also provided to broaden the sounds. All tone parameters can be adjusted using the controls on the MKS-70 while confirming the setting or status on the unit's display. An optional PG-800 Programmer can be connected to the MKS-70 to facilitate sound synthesis. Once you create a tone, you can store it in the MKS-70's internal memory together with its name (up to ten characters).

●TONE PARAMETERS

DCO-1 Range	2 ¹ /4/8/16
DCO-2 Range	2 ¹ /4/8/16
DCO-1 Waveform	∿/∟/□/Noise
DCO-2 Waveform	∿/∟/□/Noise
DCO-1 Tune	-12 to +12
DCO-2 Tune	-12 to +12
DCO-1 LFO Modulation Depth	0 to 99
DCO-2 LFO Modulation Depth	0 to 99
DCO-1 ENV Modulation Depth	0 to 99
DCO-2 ENV Modulation Depth	0 to 99
DCO Cross-Modulation Mode	Cross-Modulation/Sync 1/ Sync 2/Off
DCO-2 Fine Tune	-50 to +50
DCO Dynamics Curve Selection	Off/1/2/3
DCO ENV Modulation Mode	ENV-1 Normal/ENV-1 Inverted/ENV-2 Normal/ ENV-2 Inverted
Mix DCO-1 Level	0 to 99

Mix DCO-2 Level	0 to 99
Mix DCO-2 ENV Modulation Depth	0 to 99
Mix DCO-2 Dynamics Curve Selection	Off/1/2/3
Mix DCO-2 ENV Modulation Mode	ENV-1 Normal/ENV-1 Inverted/ENV-2 Normal/ ENV-2 Inverted
HPF Cutoff Frequency	0/1/2/3
VCF Cutoff Frequency	0 to 99
VCF Resonance	0 to 99
VCF LFO Modulation Depth	0 to 99
VCF ENV Modulation Depth	0 to 99
VCF Key Follow	0 to 99
VCF Dynamics Curve Selection	Off/1/2/3
VCF ENV Modulation Mode	ENV-1 Normal/ENV-1 Inverted/ENV-2 Normal/ ENV-2 Inverted
VCA Level	0 to 99
VCA Mode	ENV-2/Gate
VCA Dynamics Curve Selection	Off/1/2/3
Chorus	Off/1/2
LFO Waveform Selection	∿/∟/□/Random
LFO Delay Time	0 to 99
LFO Rate	0 to 99
ENV-1 Attack Time	0 to 99
ENV-2 Attack Time	0 to 99
ENV-1 Decay Time	0 to 99
ENV-2 Decay Time	0 to 99
ENV-1 Sustain Level	0 to 99
ENV-2 Sustain Level	0 to 99
ENV-1 Release Time	0 to 99
ENV-2 Release Time	0 to 99
ENV-1 Key Follow	Off/1/2/3
ENV-2 Key Follow	Off/1/2/3

Sixty-Four Patches

As with the SUPER JX, the MKS-70 features a patch memory function. There are thirty-one patch factors for determining a variety of functions, listed below. One setting of the thirty-one patch factors can be stored as the patch. The MKS-70 can store sixty-four patches together with the name of each patch (up to eighteen characters).

●PATCH FACTORS

A/B Balance	0 to 99
Dual Detune	-50 to +50
Upper Split Point	A0 to C8
Lower Split Point	A0 to C8
Portamento Time	0 to 99
Bend Range	Major Second/Minor Third/Major Third/Perfect Fifth/One Octave
Key Mode	Dual/Touch-Voice/Cross-Fade/ A Whole/B Whole/Split
Total Volume	0 to 99
Aftertouch Vibrato	0 to 99
Aftertouch Brilliance	0 to 99
Aftertouch Volume	0 to 99
A Tone Number	1 to 100
B Tone Number	1 to 100
A Chromatic Shift	-24 to +24
B Chromatic Shift	-24 to +24
A Key Assign	Poly 1/Poly 2/Unison 1/Unison 2/ Mono 1/Mono 2
B Key Assign	Poly 1/Poly 2/Unison 1/Unison 2/ Mono 1/Mono 2
A Unison Detune	-50 to +50
B Unison Detune	-50 to +50
A Hold	On/Off
B Hold	On/Off
A LFO Modulation Depth	0 to 99
B LFO Modulation Depth	0 to 99
A Portamento	On/Off
B Portamento	On/Off
A Bender	On/Off
B Bender	On/Off
Chase Play Level	0 to 99
Chase Play Mode	A-B-A-/A-B-B-/A-B
Chase Play Time	1 to 99
Chase Play Switch	On/Off

●Split Points

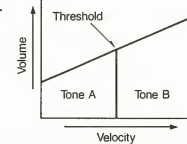
The MKS-70 has a sophisticated key split function: The lowest note of the upper part and the highest note of the lower part can be individually set. The lower and upper parts can even be overlapped.

●Six Key Modes

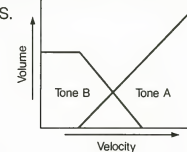
The MKS-70 offers six key modes for freely combining its two sound circuits. The two circuits are called sound source block A and sound source block B. The MIDI channel can be individually assigned to each of two sound source blocks.

1. SPLIT MODE: There are two split modes. Split Mode I is the mode in which MIDI channels assigned to the two sound source blocks are identical, and the Split Mode II is the mode in which the MIDI channels assigned to the two sound source blocks are different. In the Split Mode I, MIDI note messages higher than the upper split point control the sound source block A, and MIDI note messages lower than the lower split point control the sound source block B. In the Split Mode II, the sound source block A is controlled by the MIDI messages transmitted on the MIDI channel assigned to the sound source block A, and the sound source block B is controlled by the MIDI messages transmitted on the MIDI channel assigned to the sound source block B.
2. A WHOLE MODE: Both the sound source blocks A and B are controlled by MIDI messages transmitted on the MIDI channel assigned to the sound source block A. And both blocks produce the tone assigned to the sound source block A with twelve-voice polyphony.
3. B WHOLE MODE: Both the sound source blocks A and B are controlled by MIDI messages transmitted on the MIDI channel assigned to the sound source block B. And both blocks produce the tone assigned to the sound source block B with twelve-voice polyphony.
4. DUAL MODE: The sound source blocks A and B are controlled by the MIDI messages transmitted on the MIDI channel assigned to the sound source block A, layering two different tones. The MKS-70 is six-voice polyphonic in this mode. The MIDI channel assigned to the sound source B is used only to receive the program change message.

5. TOUCH VOICE MODE: This is a variation of the Dual Mode. The tones assigned to the sound source blocks A and B are changed by velocity change.



6. CROSS-FADE: This is another variation of the Dual Mode. The tones assigned to the sound source blocks A and B are mixed. The volume balance between them is controlled by velocity changes.



●Chase Play Function

The MKS-70 offers a Chase Play function in the Dual Mode. When this function is engaged, the tone assigned to the sound source block B is delayed while the tone assigned to the sound source block A is produced in real-time as MIDI note message is received. Three operation modes are provided: A-B-A-, A-B-B-, and A-B. The level of the delayed tone and the delay time are adjustable.

●Bender

You can determine whether or not incoming MIDI bender messages are applied individually for the sound source blocks A and B. The bend range can be set to any one of four intervals: major second, minor third, major third, perfect fifth, or one octave.

MIDI

MIDI channel is assignable to any one of sixteen channels. The Receive mode can be set by selecting the Mono or Poly mode. The Omni is always set to off status. In the Omni off/Mono mode, each of the six voices of the MKS-70 is controlled by MIDI channels (that is, the MIDI channel assigned to the MKS-70 and the following five MIDI channels). This mode allows

the guitarist to expressively control the MKS-70 using a MIDI-compatible guitar controller such as a normal electric guitar with Roland's GK-1 Synthesizer Driver and the GM-70 GR-MIDI Converter, or Roland's G-series guitar controller with the GM-70. All subtle guitar playing techniques made on the guitar controller such as bending, vibrato, and slurring can completely control the sounds produced by the MKS-70.

The MKS-70 can receive MIDI note messages 0 to 127 and produce the sound within the note range corresponding to the MIDI note numbers 21 to 108. It also receives the MIDI velocity message. And you can select whether or not the MKS-70 receives the channel aftertouch message. When the MKS-70 receives a bender message, it achieves the bending with an eight-bit resolution. The bend range can be set major second, minor third, major third, perfect fifth, or one octave. The MIDI control change messages that the MKS-70 can receive include control change number 1 Modulation, number 5 Portamento Time, number 64 Hold 1, and 65 Portamento Switch. You can also determine whether or not the MKS-70 receives the control change message for control change number 7 Volume.

The MKS-70 receives the MIDI program change messages 0 to 127 to select the patches and 0 to 99 to select the tones. It's also possible to set the MKS-70 not to receive the program change messages. The MKS-70 can also receive and transmit System Exclusive messages for transferring data for patches and the tones. The All Note Off message can also be received.

External Memory

In addition to the 100 tones and sixty-four patches stored in the MKS-70's internal memory, fifty tones, sixty-four patches, and MIDI function settings can be stored in the accessory M-64C memory cartridge.

Five Output Jacks

The MKS-70 features five output jacks—Total Mix, stereo output jacks for the sound source block A (Tone A Right and Tone A Left), and stereo output jacks for the sound source block B (Tone B Right and Tone B Left). The signal from the two sound source blocks can be freely modified in any way.

Jack	Output Signal
Total Mix	The signals from the sound source blocks A and B are mixed and put out in mono.
Tone A Left and Tone B Right	The signals from the sound source blocks A and B are mixed and put out in stereo.
Tone A Right	The signal from the sound source block A is put out in mono.
Tone B Left	The signal from the sound source block B is put out in mono.
Tone A Right and Tone A Left	The signal from the sound source block A is put out in stereo.
Tone B Right and Tone B Left	The signal from the sound source block B is put out in stereo.

